

[Feb. 20,

P.S., March 17th, 1894.—Specimens representing the following species have arrived since the above was written, and may conveniently be added to the list here :—

- 36. *RHYNCHOCYON CIRNEI*, Pet.  
a. Ad. sk. ♂. Zomba. 1/11/93.
- 37. *CANIS MESOMELAS*, Schr.  
a. Ad. sk. ♂. Palombi R., Shirwa Plain. 11/10/93.
- 38. *NANOTRAGUS SCOPARIUS* (Schr.).  
a, b. Ad. sks. Shirwa Plain. 10/93.
- 39. *CERVICAPRA ARUNDINUM* (Bodd.).  
a. Ad. sk. ♂. Palombi R. 6/10/93.

2. On a Collection of Land-Shells from the Samui Islands, Gulf of Siam. By O. F. von MOELLENDORFF, Ph.D.<sup>1</sup>

[Received December 4, 1893.]

(Plate XVI.)

Mr. C. Roebelen, a well-known collector of orchids, to whom I am indebted for a great number of interesting shells from various parts of Eastern Asia, visited, in 1888 and 1892, the small group of islands south of Bangkok, named by the Siamese Ko-Samui, and situated near the coast of the Malay Peninsula at its narrowest part. The group, from which, so far as I know, no Land-Shells were hitherto known, consists of several small islands, the largest of which is called Samui. The rock seems to be calcareous throughout: at least one small island, called Kwangtong, is, according to Mr. Roebelen, one mass of apparently madreporic limestone.

As might have been expected from their geographical position, the fauna of the Samui group is essentially Malaccan, several species being common to the adjoining mainland, and most of the forms peculiar to the group having their nearest relatives amongst the species of Siam, Tenasserim, and Perak.

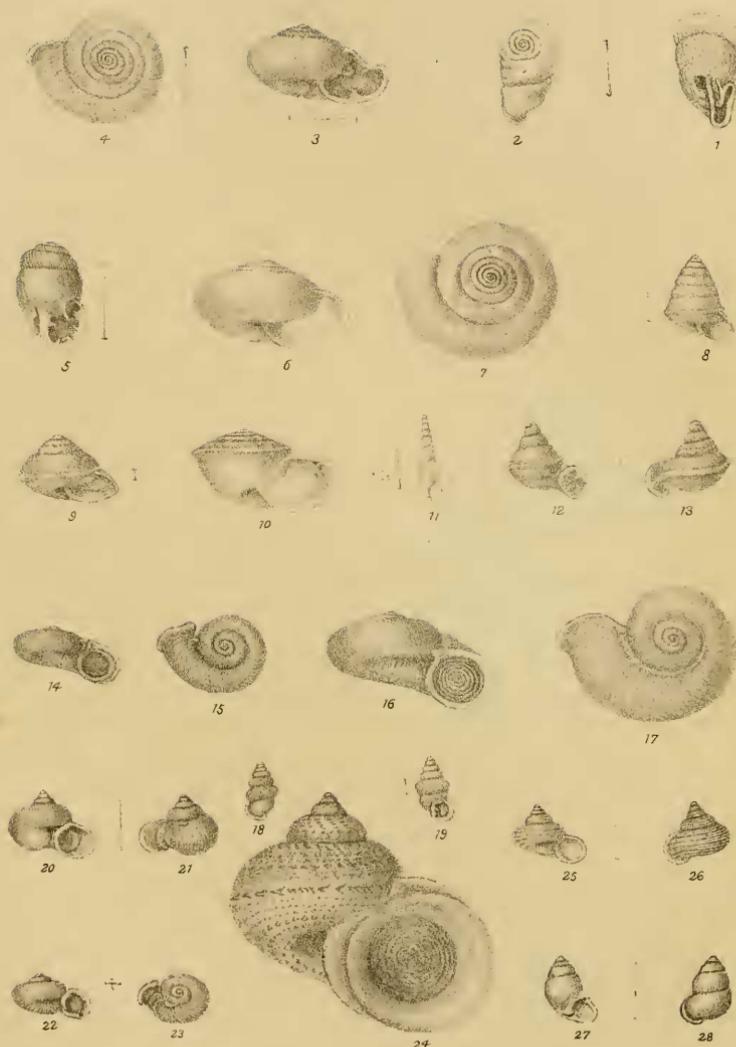
Fam. STREPTAXIDÆ.

1. *STREPTAXIS SIAMENSIS*, Pfr.

*Streptaxis siamensis*, Pfr. Mon. Hel. v. p. 449; Tryon, Man. Pulm. i. p. 79, t. xv. fig. 73.

Subsp. nov. *DEPRESSA*.—*Differat a typo spira magis depresso, anfractu ultimo magis distorto, penultimo subtus glabratu, dente*

<sup>1</sup> Communicated by Mr. G. B. SOWERBY, F.Z.S.



G.B.Sowerby del et lith.

Hanhart imp.

LAND SHELLS FROM THE SAMUI ISLANDS.

*columellari subobsoeto, nodiformi, dentibus in margine externo approximatis subequalibus.*  
*Diam. 10·5, alt. 7 millim.*

By the flatter spire and the stronger distortion of the last whorl to the right this form appears at first sight to be very different; and as there are some differences in the dentition as well, I feel almost inclined to separate it specifically. Having only one specimen of the variety and but two of the type, I leave this question for further study.

2. *STREPTAXIS MIRIFICUS*, sp. nov. (Plate XVI. figs. 1, 2.)

*T. umbilicata, depressa, subtilissime striatula, nitens, pellucida, hyalina. Anfractus 5½, planulati, superi spiram regularem perplanam apice fere immerso efficientes; penultimus ad peripherium acute carinatus; ultimus maxime distortus, valde excentricus, basi peculiariter impressus, ad aperturam valde compressus, subtus subacute cristatus, sat deflexus. Apertura maxime obliqua, perangusta, irregulariter cordiformis; peristoma sat expansum, albo-labiatum. Lamella parietalis peralta, valida, longe intrans, superne bicurvis, utrinque in callum parietalem desinens.*

*Diam. 9, alt. 4 millim.*

A fine new species of the group of *S. excavatus*, Gld., and *S. hanleyanus*, Stol., both from Moulmein, distinguished by the entirely plane spire with almost immersed centre, the bifid parietal lamella, the compressed cordiform aperture, &c.

3. *STREPTAXIS ROEBELENI*, sp. nov. (Plate XVI. figs. 3, 4.)

*T. aperte umbilicata, depressa, subtiliter arcuatim costulata, tenuis, pellucida, hyalina. Anfr. 6, convexiusculi, sat lente accrescentes, superi spiram subregularē depresso-conoideam efficientes; penultimus vix, ultimus paullum distortus, basi subinflatus, glabratus, pone aperturam coarctatus. Apertura diagonalis, truncato-elliptica; peristoma sat expansum reflexusculum, albo-labiatum, margine externo profunde sinuato, ad insertionem subito attenuato, recedente. Lamella parietalis valida triangulariter elevata, dentibus 3 lamelliformibus in margine externo et basali et nodule in columella oppositis.*

*Diam. maj. 8·5, min. 7, alt. 5·25 millim.*

*Forma major: diam. maj. 10, min. 8, alt. 5·5 millim.*

*Forma minor: „ 7·5 „ 6, „ 3·75 „*

I find no recorded form of *Streptaxis* with which this interesting species could be united. According to the rather meagre description, *S. elisa*, Gld. (Proc. Bost. Soc. vi. 1856, p. 12; Pfr. Mon. Hel. v. p. 448), of the Mergui Archipelago, must be somewhat similar, but is larger, has one whorl more, the whorls are angulate or carinate, and there are two parietal lamellæ. Both species are by their depressed and almost regular form, with very little distortion, rather isolated among the Asiatic *Streptaxes*; in the somewhat

artificial division of the genus as given by Pfeiffer they might be classed in *Discartemon*.

4. **STREPTAXIS (OOPHANA) BULBULUS**, Morelet.

*Streptaxis (Oophana) bulbulus*, Tryon, Man. Pulm. i. p. 80, t. 15. figs. 41–43.

Described from Pulo Condor. The single specimen from the Samui group is rather more ventricose, the dimensions being 15 : 11·5 millim. instead of 16·5 : 11 in the type.

5. **STREPTAXIS (OOPHANA) STRANGULATUS**, sp. nov. (Plate XVI. fig. 5.)

*T. aperte umbilicata, ovata, sat tenuis, subtiliter arcuatim costulata, sericina, hyalina; spira subregulariter ventroso-conica, apice obtuso, glabratu. Anfr. 6, sat convexi; ultimus paullum devians, circa umbilicum compressus, obtuse carinatus, pone aperturam subito coarctatus. Apertura parum obliqua, truncato-ovalis; peristoma late expansum, tenuis, intus callosum, ad insertionem marginis externi attenuatum. Lamella parietalis valida, sat elevata; dentibus 5, uno in parte superiori columellae, 2 in margine basali, 2 in margine externo oppositis.*

*Alt. 10·5, diam. 7·5 millim.*

Although certainly belonging to the group of the last species, this peculiar form differs at once in the almost regular, hardly deviating last whorl and the peculiar coaretation behind the mouth, which calls to mind the similar formation in certain species of *Alyceus* (*Dioryx*). The whorls also are more convex, the shell is thinner, the peristome broader, and there are 5 teeth instead of 3.

Mr. Aney is quite right in considering his group *Oophana*, of which *S. bulbulus* is the type, to be a connecting-link between *Streptaxis* and *Ennea*. In fact *S. strangulatus* would at first sight rather be considered as an *Ennea* by many, on account of its regular shape. That this is, however, a *Streptaxis* and not an *Ennea* may be inferred from young specimens, which show no teeth, whilst all the young *Ennea* are dentate.

Fam. NANINIDÆ.

6. **MACROCHILAMYS LIMBATA**, sp. nov. (Plate XVI. figs. 6, 7.)

*T. perforata, discoideo-depressa, solidula, subtiliter striatula, lineis spiralibus nullis, pellucida, nitens, pallide corneo-flavescens, subregulariter corneo-strigata. Anfr. 6, convexiusculi, lente ac- crescentens, sutura profunda marginata discreti; ultimus non descendens, basi convexior, circa umbilicum excavatus. Apertura fere verticalis, late elliptica, valde excisa; peristoma extus rectum, acutum, margine columellari leviter reflexo, intus callo latiusculo, sat crasso limbatum.*

*Diam. maj. 19–22·5, min. 16·5–20, alt. 10·25–13·5 millim.*

With all proper hesitation at introducing a new species of this genus, the very numerous species of which certainly require some weeding out, I cannot combine this form with any published *Macrochlamys*. Its nearest ally seems to be *M. resplendens*, Phil., var. *obesior*, Mart. (Ostas. Landschn. p. 72, t. xii. fig. 6), of Siam, which has a slight callosity behind the peristome; it is, however, only visible in very adult specimens and but a thin layer, whilst all my specimens of *M. limbata* show a distinct inner lip, which is repeated several times in the interior of the last whorl. Besides, the Samui form has a wider umbilicus, more convex whorls, equal colouring above and below, and a somewhat darker radial stripe.

#### 7. *SITALA INSULARIS*, sp. nov. (Plate XVI. fig. 8.)

*T. semiobtecta et angustissime perforata, conico-turrata, subtiliter striatula, lineis spiralibus valde confertis decussata, nitens, corneo-hyalina. Anfr. 8, planulati; ultimus ad peripheriam acute carinatus, non descendens. Apertura parum obliqua, rotundato-securiformis; peristoma rectum, acutum, margine columellari superne reflexo.*

*Diam. 3·75, alt. 4·75 millim.*

By the great number of whorls, the regular conical shape, and the very narrow spiral sculpture this species is distinguished from all forms of *Sitala* known to me.

#### 8. *KALIELLA SUBSCULPTA*, sp. nov. (Plate XVI. fig. 9.)

*T. anguste perforata, globoso-conica, tenuis, subtiliter et valde confertim costulato-striata, corneo-fusca; spira conoidea, lateribus convexis. Anfr. 6, convexi; ultimus non descendens, basi glabratius, ad peripheriam obtuse angulatus. Apertura obliqua, late lunaris; peristoma rectum, acutum, margine columellari superne triangulariter reflexo.*

*Diam. 2·9, alt. 2·7 millim.*

The only *Kaliella* described from the Malay Peninsula is *K. perakensis*, G.-Aust., which shows a similar outline, but is more distinctly carinate and only striated; it also has much less convex whorls. The sculpture of our species is similar to that of *K. sculpta*, Mdff., of Macao, which has otherwise a much lower spire and flatter whorls.

#### 9. *HEMIGLYPTA SIAMENSIS* (Pfr.).

Known from Siam and Tenasserim. The spire of the Samui form is generally more elevated.

#### 10. *ARIOPHANTA WEINKAUFFIANA INFLATA*, subsp. nov.

This variety differs from the Cochinchina type in the less distinct angulation of the periphery and the more convex, almost inflated base of the last whorl.

[Feb. 20,

## Fam. HELICIDÆ.

## 11. CHLORITIS PLATYTROPIS, sp. nov. (Plate XVI. fig. 10.)

*T. sat aperte umbilicata, convexo-depressa, tenuis, transverse striatula, punctis impressis in seribus regularibus dispositis sculpta, pilis brevissimis valde deciduis obsita, opaca, pallide corneo-brunnea; spira parum elevata, apice plano. Anfr. 4½, fere plani, sutura impressa disjuncti; ultimus ad peripheriam carina bene exserta, obtusa, lata cinctus, basi convexus, medio gibbus, circa umbilicum infundibuliformem perivium compressus, subcristatus, ad aperturam breviter deflexus. Apertura fere diagonalis, irregulariter cordiformis; peristoma sat expansum, roseolabiatum, basi reflexiusculum, marginibus valde conniventibus, callo tenui junctis, columellari cum basali angulum obtusum formante.*

*Diam. maj. 20, alt. 11·5 millim.*

*Hab.* prope vicum Chaya, in littore peninsulae malaccanae insulis Samui opposito.

Subsp. nov. SAMUIANA.—*Minor, tenuior, spira paullo magis convexa, peristome minus expanso, vix labiato.*

*Diam. 16·5, alt. 9 millim.*

*Hab.* in insulis Samui.

This fine form belongs to the group of keeled *Chlorites*, for which de Morgan has created the unnecessary subgenus *Philidora* (cf. P. Z. S. 1891, p. 336), and is closely allied to *C. gabata*, Gld., of Mergui and Tenasserim. The type was found by Mr. Roebelen near Chaya, a village on the Malay Peninsula just opposite the Samui group within Siamese territory, the smaller variety on our islands.

## 12. PUPISOMA ORCELLA, Stol.

*Pupisoma orcella*, Stol. J. A. S. B. xlvi. 1873, p. 33, t. ii. fig. 2.

The Samui examples differ from the Penang type merely in their somewhat darker colour and slightly more elevated spire.

That *Pupisoma* has nothing to do with *Pupa*, but belongs to the parentage of *Acanthinula* and *Zoogenetes* (*H. harpa*, Say), I have tried to prove elsewhere (Jahresber. Senckenb. nat. Ges. 1890, p. 223).

## Fam. BULIMIDÆ.

## 13. AMPHIDROMUS MONILIFERUS, Gld.

Only one dead specimen was found, which seems to agree with the above-named species described from Tavoy.

Near Chaya Mr. Roebelen collected a fine variety of *A. annamiticus*, Cr. et Fisch., with rose-coloured apex which I name var. *roseotincta*.

## Fam. STENOZYRIDÆ.

14. OPEAS GRACILE, Hutt.

15. OPEAS FILIFORME, sp. nov. (Plate XVI. fig. 11.)

*T. rimata, gracillime turrita, tenuis, subtiliter et maxime confertim striatula, nitens, pellucida, albida; spira sensim attenuata, apice obtusulo. Anfr. 7½, convexiusculi, lente accrescentes, sutura sat impressa discreti. Apertura modice obliqua, anguste acuminate-ovalis; peristoma rectum, acutum, margine columellari incrassato-reflexo.*

*Alt. 5·5, diam. 1·5 millim.*

I do not know any similar small and slender species of *Opeas*; the comparatively great number of whorls show that it is adult.

## Fam. PUPIDÆ.

16. VERTIGO (STAURODON) MORELETI, Brown.

Subsp. nov. SAMUIANA.

Differs from the Borneo and the Philippine-Island type (v. Jahresb. Senckenb. nat. Ges. 1890, p. 252) in the slightly more contracted shell and in the somewhat deeper groove behind the outer peristome.

17. HYPSELOSTOMA TRANSITANS, sp. nov. (Plate XVI. figs. 12, 13.)

*T. umbilicata, turbinata, oblique striatula, fusca. Anfr. 4, convexi, spiram conicam apice papillari formantes; ultimus paullum distortus, antice non ascendens, breviter solitus et porrectus, ad peripheriam crista sat prominente, altera minore ad suturam cinctus, basi subgibber, circa umbilicum compressus. Apertura parum obliqua, rotundato-tetragona; peristoma continuum, tenue, expansum, hand reflexum. Lamella parietalis validiuscula, antice bifida, dentibus 2 in margine externo, 1 in basi et 1 in columella oppositis.*

*Diam. 2·75, alt. 2·66 millim.*

This peculiar shell presents an especial interest inasmuch as it forms a decided transition from *Hypselostoma* to the Indian and Chinese *Boysidia*, Ancey, of which *Pupa hunanensis*, Gredl., is the type. As I have mentioned in the description of *Hypselostoma hungerfordianum* (P. Z. S. 1891, p. 338), the genus appears to be but an extreme development of the *Boysidia* type. *Boysidia strophostoma*, Mdff., of South China, shows already a slight distortion and detachment of the last whorl, which in the Samui species is much less developed than in the other forms of the genus. There can be no doubt, however, that it belongs to *Hypselostoma*, with which it has the peculiar quadrangular shape of the last whorl and the dentition of the aperture in common. *H. cressei*, Mor., of Tongkin seems to connect it with the other Malayan species.

18. *HYPSELOSTOMA STRIOLATUM*, sp. nov.

Owing to the bad state of preservation of the two specimens of this form, quite distinct from the preceding one, I cannot give a complete description of it. Its last whorl is much more detached than in *H. transitans* and distinctly bent upwards, and shows very distinct though minute spiral lines. The diameter is only 2·5 millim. It belongs to the group of *H. bensonianum* and *H. hungerfordianum*.

## Fam. ASICULIDÆ.

19. *TRUNCATELLA VALIDA*, Pfr.20. *TRUNCATELLA SEMICOSTATA*, Mouss.

## Fam. CYCLOPHORIDÆ.

21. *OPISTHOPORUS SETOSUS*, sp. nov. (Plate XVI. figs. 14, 15.)

*T. latissime umbilicata, discoidea, tenuis, transverse confertim costulato-striata, setis brevibus densis deciduis hirsuta, olivaceo-cornea; spira vix prominula, apice submucronato. Anfr. 4½, terces, sutura profunda disjuncti; ultimus paullum descendens, pone aperturam tubulum suturalem brevem ad anfractum penultimum recurvatum gerens, tum subsolutus. Apertura sat obliqua, subcircularis; peristoma duplex, internum tenue, breviter porrectum, externum expansum, campanulatum, superne ad insertionem breviter auriculatum. Operculum extus fere planum, lamina calearea anfr. 8 transverse costulo-striatis, sulco sut profundo ab interna temni cornea separata.*

*Diam. maj. 14, min. 10·5, alt. 5·5 millim.*

*Forma conoidea: minor, arctius umbilicata, spira magis elevata, anfractus ultimus magis descendens, longius solutus.*

*Diam. 11·5, alt. 7 millim.*

In size and general outline this species agrees somewhat with *O. corniculum* of Java, but the spire is still flatter, the position of the sutural tube is different, and the hirsuteness distinguishes it from the Javan and from all other known *Opisthopori*.

22. *RHIOSTOMA HOUSEI*, Haines.

Three specimens of a fine large *Rhiostoma* agree very well with the diagnosis of this Siamese species, of which I cannot compare either examples or figures. The largest specimen measures 28 millim. in diameter and is 16·5 high, the operculum is 8·5 millim. wide, 3 high.

23. *RHIOSTOMA ASIPHON*, sp. nov. (Plate XVI. figs. 16, 17.)

*T. late et perspective umbilicata, convexo-depressa, solida, transverse plicato-striatula, cinerascenti-brunnea, interdum indistincte marmorata et taeniata; spira parum elevata, apice subacuto. Anfr. 5, percomexi; ultimus antice solutus et deflexus, in parte soluta superne albo-carinatus. Apertura obliqua, circularis; peristoma valde incrassatum, multiplicatum, superne intus leviter incisum, ectus in alam recedentem haud tubulum formantem productum.*

*Oberculum cyathiforme, subtestaceum, intus profundissime cylindrico-excavatum, leve, nitens, extus breviter cylindricum, tum semiglobosum, apice subplano, anfr. 12 marginibus lamellatim elevatis, in interstitiis oblique striati.*

*Diam. maj. 24.5, min. 18, alt. 13.5; operculi diam. 6, alt. 4 millim.*

This very interesting form differs from all known species of *Rhiostoma* in the want of a sutural tube, whilst the operculum is quite typical. This is another proof that the formation of a tube, which is but an extreme development of the "wing" at the peristome of *Eucyclotus* and *Pterocyclus*, is of less systematic value than is generally supposed. The classification of operculate shells will have ultimately to rely upon the structure of the operculum chiefly, if not exclusively.

#### 24. CYCLOPHORUS MALAYANUS, Bens.

Whilst Prof. von Martens is quite right in combining the so-called *C. malayanus* of the 'Conchologia Indica' and of Reeve with the very variable *C. aurantiacus*, Schum. (Journ. Linn. Soc., Zool. xxi. 1887, p. 159), I believe with him that the true *C. malayanus*, Bens., of Pulo Penang is a distinct species. A fine large *Cyclophorus* of the Samui group I consider to belong to it, although I cannot compare typical specimens. My largest example measures 48 by 39 millim.

#### 25. CYCLOPHORUS DIPLOCHILUS, sp. nov. (Plate XVI. fig. 24.)

*T. pro genere anguste umbilicata, subdepresso turbinata, solida, transverse leviter striatula, lineis spiraliibus rugulosis decussata, pallide corneo-fusca, tenuis interruptis castaneis, interdum strigis castaneis flammulatis picta. Anfr. 4½, perconvexi, ad suturam subplanati; ultimus antice via descendens. Apertura sat obliqua, circularis; peristoma duplex, externum album, late expansum, revolutum, marginibus callo junctis, columellari dilatato; internum aureum aut aurantiacum, valde nitens, continuum, late expansum, margine dextro valde dilatato, crassum, quasi multiplicatum, sulco ab externo separatum. Operculum normale.*

*Diam. maj. 38, min. 28, alt. 31; diam. apert. c. perist. 24, intus 1.4 millim.*

*Forma minor: diam. maj. 30, min. 22.5, alt. 25; diam. apert. 18, intus 11 millim.*

At first I believed this fine shell to be *C. cucullatus*, Gld., of Mergui, of which no figure has been published, and which v. Martens in his able paper on the Mergui Archipelago does not mention. According to the diagnosis of Gould's species as given by Pfeiffer (Mon. Pneum. suppl. i. p. 44), however, there appear to exist sufficient differences to justify the separation of the two forms specifically. *C. cucullatus* is considerably smaller, white, the last whorl subangulate, the columellar margin not dilatate, the outer peristome is only called "reflexiusculum," whilst in my species it is strongly recurved, &c. Otherwise the formation of

the peristome, the inner yellow or orange lip contrasting with the white outer one, the widening of the peristome to the right, &c., must be analogous according to Pfeiffer's description.

26. *LAGOCHEILUS LIRATULUS*, sp. nov. (Plate XVI. figs. 25, 26.)

*T. anguste umbilicata, turbinata, sat tenuis, nitidula, transverse subtiliter striatula, lineis spiralibus elevatis sat confertis usque ad umbilicum cincta, cornuo-flava, obsolete strigata. Anfr. 5½, convexi; ultimus antice paullum descendens. Apertura sat obliqua, fere circularis; peristoma subduplex, tenue, breviter expansum, haud reflexum, ad insertionem breviter excisum.*

*Diam. maj. 5, min. 4·25, alt. 5 millim.*

Differs from *L. townsendianus*, Crosse, of Perak, in the smaller size, the higher and more pointed spire, the more convex whorls, the narrower umbilicus, the want of angulation in the last whorl, and the equally distant, uniform spiral lines.

Fam. DIPLOMMAΤINIDÆ.

27. *ALYCEUS ROEBELENI*, sp. nov. (Plate XVI. figs. 20, 21.)

*T. modice umbilicata, subdepresso turbinata, tenuis, pellucida, costulo-striata, lineis spiralibus microscopicis decussata, lete flava; spira modice elevata, lateribus subconcavis, apice obtusulo glabratu. Anfractus 5, perconvexi, ad suturam profunde impressam subplanati; ultimus postice spiram altitudine multo superans, valde inflatus, gibber, 4 millim. pone aperturam valde constrictus, tum denudo dilatatus, ad aperturam sat deflexus. Apertura diagonalis, subcircularis; peristoma continuum, rix duplicatum, sat expansum, haud reflexum, flavo-labiatum. Operculum corneum, valde concavum, anfr. 6. Tubulus suturalis brevis, appressus.*

*Diam. maj. 9·5, alt. 7 millim.*

Var. minor: *spira paullo magis elevata. Diam. 8·5, alt. 7 millim.*

Although nearly related to *A. perakensis*, Crosse, this form must, I think, be separated specifically. It is larger, much less elevated, more widely umbilicated, the last whorl comparatively higher, about four-sevenths of the total altitude, and much more tumid, more deflected at the end, and therefore the plane of the aperture much more oblique, the constriction deeper, the peristome hardly double, not so thick, and yellow instead of white. Besides there is half a whorl less, as I count distinctly  $5\frac{1}{2}$  in *A. perakensis*. Unless transitory forms exist in the, as yet, little-explored Malay Peninsula, I think these differences sufficient to consider the Samui race a distinct species.

28. *ALYCEUS CANALICULATUS*, sp. nov. (Plate XVI. figs. 22, 23.)

*T. sat aperte umbilicata, depresso, solidula, confertim costulata, pallide cornea; spira parum elevata, convexo-conoidea. Anfr. 3½, convexi; ultimus a medio inflatus, subgibber, pone apertu-*

*ram valde constrictus, tum campanulatus, sublevigatus, in media parte levigata obtuse cristatus. Apertura diagonalis, subcircularis; peristoma duplex, externum sat expansum, internum continuum, valde porrectum incrassatum, superne et basi effusum et subcanaliculatum.*

*Diam. maj. 2·25, min. 1·75, alt. 1·2 millim.*

Evidently a near ally of the small Perak species, such as *A. microdiscus*, m., but at once distinguished by the peculiar grooves near the upper insertion and at the base of the peristome.

29. DIPLOMMATINA (SINICA) SAMUIANA, sp. nov. (Plate XVI. figs. 18, 19.)

*T. dextrorsa, elongate ovato-conica, confertim costulata, pallide cornea. Anfr. 7, modice convexi, superi 5 spiram subregulariter conicam efficientes; penultimus magnus; ultimus angustior, paulum distortus, initio constrictus, antice ascendens. Apertura verticalis, subcircularis; peristoma duplex, externum modice expansum, superne interruptum, internum incrassatum, sat porrectum, basi columella angulum distinctum formans. Lamella columellaris humili, palatalis longiuscula, subhorizontalis, supra columellam conspicua.*

*Alt. 2·5, diam. 1·33 millim.*

#### Fam. PUPINIDÆ.

30. PUPINA ARTATA, Bens.

31. PUPINA PALLENS, sp. nov. (Plate XVI. figs. 27, 28.)

*T. conoideo-ovata, levigata, nitens, pallide corneo-brunnea. Anfr. 6, convexiusculi; ultimus sat distortus, supra aperturam applanatus, antice breviter ascendens. Apertura paullum retrorsum inclinata, circularis; peristoma expansiusculum, haud reflexum, margo externus ad insertionem attenuatus, recedens cum lamella parietali triangulari valida canalem superum formans, basalis et columellaris incrassati et dilatati. Canalis inferus angustus, horizontalis, postice in foramen subcirculare desinens.*

*Alt. 8, diam. 5·5 millim.*

This somewhat difficult form agrees in size with *P. arula*, Bens., of Perak and Tenasserim, but differs in the more obtuse spire, the more distorted last whorl, and consequently the aperture placed more to the right and protracted at the base, the thinner outer peristome, the broader columella, the broad triangular parietal lamella, and the narrower lower incision.

#### Fam. HYDROCÆNIDÆ.

32. GEORISSA MONTEROSATIANA, Nev. et G.-A.

Subsp. nov. SAMUIANA.—*Minor, anfr. magis convexis. Alt. 2·5, diam. 1·5 millim.*

A slight modification of the Perak type.

## EXPLANATION OF PLATE XVI.

Figs. 1, 2. *Streptaxis mirificus*, p. 147.  
 3, 4. — *roebelei*, p. 147.  
 5. — (*Oophana*) *strangulatus*, p. 148.  
 6, 7. *Macrochlamys limbata*, p. 148.  
 8. *Sitala insularis*, p. 149.  
 9. *Kaliella subsculpta*, p. 149.  
 10. *Chloritis platyfropis*, p. 150.  
 11. *Opeas filiforme*, p. 151.  
 12, 13. *Hypselostoma transitans*, p. 151.  
 14, 15. *Opisthoporus setosus*, p. 152.  
 16, 17. *Rhiostoma asiphon*, p. 152.  
 18, 19. *Diplommatina samuiana*, p. 155.  
 20, 21. *Alyceus roebeleni*, p. 154.  
 22, 23. — *canaliculatus*, p. 154.  
 24. *Cyclophorus diplochilus*, p. 153.  
 25, 26. *Logoeheilus liratus*, p. 154.  
 27, 28. *Pupina pallens*, p. 155.

3. A List of the Hemiptera-Heteroptera of the Families *Anthocoridae* and *Ceratocombidae* collected by Mr. H. H. Smith in the Island of St. Vincent; with Descriptions of New Genera and Species. By P. R. UHLER.<sup>1</sup>

[Received January 22, 1894.]

A. List of Species of which specimens were obtained.

ANTHOCORIDÆ.

*Lasiochilus pallidulus*, Reuter.  
 — *variabilis*, Uhler.  
 — *pictus*, sp. nov.  
 — *fraternus*, Uhler.  
*Piezostethus sordidus*, Reuter.  
*Triphleps perpunctatus*, Reuter.  
*Brachysteles pallidus*, Reuter.  
*Cardiastethus elegans*, Uhler.  
 — *consimilis*, Uhler.

CERATOCOMBIDÆ.

*Ceratoconbus brasiliensis*, Reuter.  
 — *minutus*, Uhler.  
*Cryptostemma fasciatum*, Uhler.  
*Schizoptera flavipes*, Reuter.  
 — *scutellata*, sp. nov.  
 — *capitata*, sp. nov.  
*Ommatides* (gen. nov.) *insignis*, sp. nov.  
*Oncerodes* (gen. nov.) *robusta*, sp. nov.

<sup>1</sup> Communicated by Dr. D. Sharp, F.R.S., F.Z.S., on behalf of the West India Islands Committee.

[In the list of St. Vincent Hemiptera recently communicated to the Society (see P. Z. S. 1893, p. 705) it was mentioned that Prof. Uhler had been obliged to leave the Anthocoridae and Ceratocombidae undetermined, the material sent to him being inadequate for the study of such difficult insects. Since then Prof. Uhler has received from the Committee additional material—chiefly from the neighbouring island of Grenada—which has enabled him to complete his enumeration of the two groups of Heteroptera in question, and I now communicate to the Society the results of this part of his work. We hope that the list of Hemiptera-Heteroptera of Grenada will shortly be in the possession of the Committee.—D. S.]

## B. Descriptions of New Genera and Species.

## Fam. ANTHOCORIDÆ.

## Genus LASIOCHILUS.

## LASIOCHILUS PICTUS, sp. nov.

In form similar to *L. nebulosus*, Uhler, but somewhat narrower, with the head a little more tapering. Above pale rufo-flavous and testaceous, beneath pale rufo-piceous. Head moderately short, rufo-testaceous, minutely rugulose in front, with a triangular impressed line between the eyes, near which the surface is slightly granulated : the neck is a little swollen, highly polished, slightly wider than the space between the eyes, bounded in front by an impressed line with some punctures ; the front narrower and longer than the neck, with the sutures bounding the tylus deeply defined ; antennæ moderately slender, not setaceous, testaceous, a little dusky, the second joint much the longest, a little thicker towards the tip, the third joint much more slender, a little shorter than the fourth, which is a little thicker than it ; rostrum pale fuscous, slender, reaching as far as the middle coxæ. Pronotum trapezoidal, wider than long, with the lateral oblique margin pale testaceous, reflexed, with the anterior angle a little rounded ; surface rufo-testaceous, polished, remotely pubescent, the callosity of the anterior lobe long, convexly prominent ; collum scarcely projecting beyond the side of the head, narrow, but distinct; the posterior lobe large, punctate, the punctures continuing forward on the sides, the posterior margin hardly sinuated, with the humeral angles callous, pale, and acute. Scutellum pale reddish brown, depressed and punctate behind the middle. Hemelytra pale testaceous, minutely pubescent, closely punctate except upon the posterior part of the corium ; the cuneal portion smoke-brown, but darker exteriorly, and dull testaceous on the costal border ; posterior margin of the corium also brown ; membrane soiled whitish. Legs dusky testaceous. Venter clouded with dusky brown, a little paler exteriorly, the posterior margins of the segments fringed with yellowish hairs, and most of the ventral surface spread with fine yellowish pubescence.

Length to tip of abdomen 2 millim.; width of base of pronotum  $\frac{3}{4}$  millim.

One or two specimens were found on the leeward side of St. Vincent, and others were taken in the island of Grenada.

## Fam. CERATOCOMBIDÆ.

## Genus SCHIZOPTERA, Fieber.

## SCHIZOPTERA SCUTELLATA, sp. nov.

In form similar to *S. rutteri*, Reuter, but with the membrane more tapering posteriorly. Subconic-ovate, black, opaque, minutely pubescent, with a broad orange band covering the clavus, except